

Influence of the photonic crystal medium on the self-interaction of electrons

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Abstract

© Published under licence by IOP Publishing Ltd. The self-interaction of an electron in the photonic crystal medium is investigated. We show that modification of the self-interaction of electrons in photonic crystals is very significant and, as a consequence, at some photon frequencies the electron-light interaction becomes effectively strong.

<http://dx.doi.org/10.1088/1742-6596/613/1/012001>
